

ABSTRACT

A flexible scintillation-type level detector (10), in which the scintillator (18) is made from a flexible tube (12) substantially filled with a liquid scintillating material (16) to provide flexibility in at least two, and preferably three, dimensions. At least one end (32) is aligned for operable connection to a photodetector (14, 20). Outer surfaces of the flexible tube (12) may be covered with an inwardly-facing light reflective material (30) and/or light-excluding material or flexible armored casing (22). The scintillator (18) may include a variable-volume expansion chamber (110, 152, 176) to compensate for thermal expansion and contraction of the liquid scintillator material (16).